

6/670,015

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=> file biosis medline caplus wpids uspatfull  
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\*\*\* YOU HAVE NEW MAIL \*\*\*

=> s (fluorenylmethoxycarbonyl or fmoc)(6a) basw  
L1 0 (FLUORENYLMETHOXYCARBONYL OR FMOC)(6A) BASW

=> s (fluorenylmethoxycarbonyl or fmoc)(6a) base  
L2 1219 (FLUORENYLMETHOXYCARBONYL OR FMOC)(6A) BASE

=> s l2 and nucleotide  
L3 521 L2 AND NUCLEOTIDE

=> s l3 and synthesis (4a) oligonucleotide  
L4 190 L3 AND SYNTHESIS (4A) OLIGONUCLEOTIDE

=> s l4 and solid support  
L5 171 L4 AND SOLID SUPPORT

=> s l5 and solid support (4a) alkyl amine  
L6 0 L5 AND SOLID SUPPORT (4A) ALKYL AMINE

=> s l5 and alkyl amine  
L7 5 L5 AND ALKYL AMINE

=> dup rem l7  
PROCESSING COMPLETED FOR L7  
L8 5 DUP REM L7 (0 DUPLICATES REMOVED)

=> s l8 and dbu  
L9 2 L8 AND DBU

=> d l9 bib abs 1-2

L9 ANSWER 1 OF 2 USPATFULL on STN  
AN 1998:14925 USPATFULL  
TI Phosphoramidate and phosphorothiomidate oligomeric compounds  
IN Cook, Phillip Dan, Vista, CA, United States  
Acevedo, Oscar, San Diego, CA, United States  
Hebert, Normand, Cardiff, CA, United States  
PA ISIS Pharmaceuticals, Inc., Carlsbad, CA, United States (U.S.  
corporation)

PI US 5717083 19980210  
WO 9523160 19950831  
AI US 1996-693112 19960819 (8)  
WO 1995-US2267 19950223  
19960819 PCT 371 date  
19960819 PCT 102(e) date  
RLI Continuation-in-part of Ser. No. US 1994-200638, filed on 23 Feb 1994,  
now patented, Pat. No. US 5637684  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Guzo, David  
LREP Woodcock Washburn Kurtz Mackiewicz & Norris LLP  
CLMN Number of Claims: 40  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 2743

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compounds are provided having structure (I), wherein the L groups are backbone segments, the Y and T groups are functional groups for interacting with target molecules of interest, the X groups are oxygen or sulfur and the E groups are H, conjugate groups or intermediate groups used during the synthesis of the compounds and wherein the compounds are prepared using H phosphonate type chemistry wherein the functional groups are added during an oxidation step or during a coupling step. ##STR1##

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 2 OF 2 USPATFULL on STN  
AN 97:49731 USPATFULL  
TI Phosphoramidate and phosphorothioamidate oligomeric compounds  
IN Cook, Phillip D., Carlsbad, CA, United States  
Acevedo, Oscar, San Diego, CA, United States  
Hebert, Normand, San Marcos, CA, United States  
PA ISIS Pharmaceuticals, Inc., Carlsbad, CA, United States (U.S. corporation)  
PI US 5637684 19970610  
AI US 1994-200638 19940223 (8)  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Elliott, George C.; Assistant Examiner: Larson, Thomas G.  
LREP Woodcock Washburn Kurtz Mackiewicz & Norris  
CLMN Number of Claims: 21  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 1746

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compounds are provided having the structure: ##STR1## wherein the L groups are spanner or linker units, the Y and T group are functional groups for interacting with target molecules of interest, the X groups are oxygen or sulfur and the E groups are H, conjugate groups or intermediate groups used during the synthesis of the compounds are prepared using H phosphonate type chemistry wherein the functional groups are added during an oxidization step.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d his

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FILE 'BIOSIS, MEDLINE, CAPLUS, WPIDS, USPATFULL' ENTERED AT 21:33:36 ON 19 FEB 2007

L1 0 S (FLUORENYLMETHOXYCARBONYL OR FMOC)(6A) BASW  
L2 1219 S (FLUORENYLMETHOXYCARBONYL OR FMOC)(6A) BASE  
L3 521 S L2 AND NUCLEOTIDE  
L4 190 S L3 AND SYNTHESIS (4A) OLIGONUCLEOTIDE  
L5 171 S L4 AND SOLID SUPPORT  
L6 0 S L5 AND SOLID SUPPORT (4A) ALKYL AMINE  
L7 5 S L5 AND ALKYL AMINE  
L8 5 DUP REM L7 (0 DUPLICATES REMOVED)  
L9 2 S L8 AND DBU

=> s 18 not 19

L10 3 L8 NOT L9

=> d l10 bib abs 1-3

L10 ANSWER 1 OF 3 USPATFULL on STN  
AN 1999:72444 USPATFULL  
TI Multifunctional linking reagents for synthesis of branched oligomers  
IN Iyer, Rajkumar Siva, Dublin, CA, United States  
Su, Sheng-Hui, San Ramon, CA, United States  
Inamdar, Anita, Sunnyvale, CA, United States  
Kalra, Krishan L., Danville, CA, United States  
PA BioGenex Laboratories, San Ramon, CA, United States (U.S. corporation)  
PI US 5916750 19990629  
AI US 1997-780725 19970108 (8)  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Houtteman, Scott W.  
LREP Weseman, Esq., James C. The Law Offices of James C. Weseman  
CLMN Number of Claims: 26  
ECL Exemplary Claim: 1  
DRWN 7 Drawing Figure(s); 5 Drawing Page(s)  
LN.CNT 1415  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB Reagents capable of forming branched oligomers with monomeric units are disclosed, together with oligomers incorporating such reagents, kits containing such reagents and methods for use of such reagents in forming oligomers with monomeric units. The present reagents can advantageously be used to introduce multiple labels or reporter molecules onto oligomers such as oligonucleotides and oligopeptides. In particular, non-nucleosidic phosphoramidites based on 1,3,5-tris(2-hydroxyethyl)cyanoic acid are disclosed. Multiply-labeled, branched DNA oligomer probes constructed using these phosphoramidite reagents showed increased signal intensity relative to singly-labeled oligomer probes.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 2 OF 3 USPATFULL on STN  
AN 95:27404 USPATFULL  
TI Method for labeling the 3' terminus of a synthetic oligonucleotide using a unique multifunctional controlled pore glass (MF-CPG) reagent in solid phase oligonucleotide synthesis  
IN Nelson, Paul S., Union City, CA, United States  
PA Clontech Laboratories, Inc., Palo Alto, CA, United States (U.S. corporation)  
PI US 5401837 19950328

AI US 1992-934582 19920824 (7)  
RLI Division of Ser. No. US 1989-399658, filed on 28 Aug 1989, now patented,  
Pat. No. US 5141813  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Rollins, John W.; Assistant Examiner: Kunz, Gary L.  
LREP Saliwanchik & Saliwanchik  
CLMN Number of Claims: 9  
ECL Exemplary Claim: 1,2  
DRWN 7 Drawing Figure(s); 3 Drawing Page(s)  
LN.CNT 602

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method for derivatizing and labeling the 3'-terminus of an  
oligonucleotide during solid phase synthesis  
comprising the use of a multifunctional reagent whose preferred  
structure is shown below. ##STR1## wherein CPG is controlled pore glass  
beads, Fmoc is 9-fluorenylmethoxycarbonyl, and the alkylamine contains  
1 to 50 carbon atoms.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 3 OF 3 USPATFULL on STN  
AN 92:70202 USPATFULL  
TI Multifunctional controlled pore glass reagent for solid phase  
oligonucleotide synthesis  
IN Nelson, Paul S., Union City, CA, United States  
PA Clontech Laboratories, Inc., Palo Alto, CA, United States (U.S.  
corporation)  
PI US 5141813 19920825  
AI US 1989-399658 19890828 (7)  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Brown, Johnnie R.; Assistant Examiner: Kunz, Gary L.  
LREP Saliwanchik & Saliwanchik  
CLMN Number of Claims: 2  
ECL Exemplary Claim: 1  
DRWN 7 Drawing Figure(s); 6 Drawing Page(s)  
LN.CNT 597

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The subject invention concerns a novel multifunctional solid  
support reagent which is useful in solid phase  
oligonucleotide synthesis. Specifically, the reagent  
is used in a solid phase oligonucleotide process to chemically modify  
the 3' terminus of a synthetic oligonucleotide with any chemical  
functional group. The invention reagent can be used to construct 3'  
labeled oligonucleotide hybridization probes to detect the presence of a  
target polynucleotide in biological and clinical samples.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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FILE 'BIOSIS, MEDLINE, CAPLUS, WPIDS, USPATFULL' ENTERED AT 21:33:36 ON 19 FEB 2007

L1 0 S (FLUORENYLMETHOXYCARBONYL OR FMOC)(6A) BASW  
L2 1219 S (FLUORENYLMETHOXYCARBONYL OR FMOC)(6A) BASE  
L3 521 S L2 AND NUCLEOTIDE  
L4 190 S L3 AND SYNTHESIS (4A) OLIGONUCLEOTIDE  
L5 171 S L4 AND SOLID SUPPORT  
L6 0 S L5 AND SOLID SUPPORT (4A) ALKYL AMINE  
L7 5 S L5 AND ALKYL AMINE  
L8 5 DUP REM L7 (0 DUPLICATES REMOVED)  
L9 2 S L8 AND DBU  
L10 3 S L8 NOT L9  
L11 139 S L5 AND PHOSPHORAMIDITE  
L12 10 S L11 AND PHOSPHORAMIDITE (6A) (FLUORENYLMETHOXYCARBONYL OR FMO  
L13 10 S L12 NOT L8  
L14 10 DUP REM L13 (0 DUPLICATES REMOVED)

=> s l14 and dbu

L15 7 L14 AND DBU

=> d l15 bib abs 1-7

L15 ANSWER 1 OF 7 USPATFULL on STN  
AN 2006:9965 USPATFULL  
TI Compositions and methods of synthesis and use of novel nucleic acid structures  
IN Eritja, Ramon, Barcelona, SPAIN  
Garcia, Ramon Guimil, Heidelberg, GERMANY, FEDERAL REPUBLIC OF  
PI US 2006008813 A1 20060112  
AI US 2004-966672 A1 20041014 (10)  
RLI Continuation of Ser. No. US 2002-55732, filed on 22 Jan 2002, GRANTED, Pat. No. US 6831072 Continuation-in-part of Ser. No. US 2000-702066, filed on 30 Oct 2000, ABANDONED  
PRAI US 1999-162627P 19991029 (60)  
US 2000-197559P 20000417 (60)  
DT Utility  
FS APPLICATION  
LREP BUCHANAN INGERSOLL, P.C., ONE OXFORD CENTRE, 301 GRANT STREET, 20TH FLOOR, PITTSBURGH, PA, 15219, US  
CLMN Number of Claims: 10  
ECL Exemplary Claim: 1-8  
DRWN 38 Drawing Page(s)  
LN.CNT 2094  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB The present invention is directed to a method to produce 8-amino-2'-deoxyadenosine by treating 8-azido-2'-deoxyadenosine with an aqueous solution of methylamine or dimethylamine.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 2 OF 7 USPATFULL on STN  
AN 2003:195229 USPATFULL  
TI Compositions and methods of synthesis and use of novel nucleic acid structures  
IN Eritja, Ramon, Barcelona, SPAIN  
Garcia, Ramon Guimil, Heidelberg, GERMANY, FEDERAL REPUBLIC OF  
PI US 2003135040 A1 20030717  
US 6831072 B2 20041214  
AI US 2002-55732 A1 20020122 (10)

RLI Continuation-in-part of Ser. No. US 2000-702066, filed on 30 Oct 2000,  
PENDING  
PRAI US 1999-162627P 19991029 (60)  
US 2000-197559P 20000417 (60)  
DT Utility  
FS APPLICATION  
LREP JOHN S. PRATT, ESQ, KILPATRICK STOCKTON, LLP, 1100 PEACHTREE STREET,  
SUITE 2800, ATLANTA, GA, 30309  
CLMN Number of Claims: 8  
ECL Exemplary Claim: 1  
DRWN 38 Drawing Page(s)  
LN.CNT 1915  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB The present invention is directed to a method to produce  
8-amino-2'-deoxyadenosine by treating 8-azido-2'-deoxyadenosine with an  
aqueous solution of methylamine or dimethylamine.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 3 OF 7 USPATFULL on STN  
AN 1999:19304 USPATFULL  
TI Synthesis of diverse and useful collections of oligonucleotidies  
IN Shortle, David R., Baltimore, MD, United States  
Sondek, John, New Haven, CT, United States  
PA The Johns Hopkins University, Baltimore, MD, United States (U.S.  
corporation)  
PI US 5869644 19990209  
AI US 1996-689346 19960808 (8)  
RLI Continuation of Ser. No. US 1994-66178, filed on 30 Sep 1994, now  
abandoned which is a continuation-in-part of Ser. No. US 1992-868489,  
filed on 15 Apr 1992, now abandoned  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Chambers, Jasmine C.; Assistant Examiner: Priebe,  
Scott D.  
LREP Banner & Witcoff, Ltd.  
CLMN Number of Claims: 17  
ECL Exemplary Claim: 1,3,10,15,16  
DRWN 4 Drawing Figure(s); 4 Drawing Page(s)  
LN.CNT 1003  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB A new technique for generating mixtures of oligonucleotides in a single  
automated synthesis is taught. The method can be used to prepare mixed  
oligonucleotides ideally suited for creation of useful mixtures of  
oligo- or polypeptides or proteins. Additionally, the technique enables  
insertion and/or substitution and/or deletion of a nucleotide  
sequence at one or more sites. For protein mutagenesis, a trinucleotide  
can be inserted or substituted at codon boundaries. The invented  
technique makes possible the encoding of all possible single amino acid  
insertions, or any desired mixture of substitutions and insertions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 4 OF 7 USPATFULL on STN  
AN 92:44943 USPATFULL  
TI DNA-reporter conjugates linked via the 2' or 5'-primary amino group of  
the 5'-terminal nucleoside  
IN Smith, Lloyd M., South Pasadena, CA, United States  
Fung, Steven, Palo Alto, CA, United States  
Kaiser, Jr., Robert J., Glendale, CA, United States  
PA California Institute of Technology, Pasadena, CA, United States (U.S.  
corporation)  
PI US 5118802 19920602  
AI US 1991-661913 19910227 (7)

RLI Division of Ser. No. US 1988-287387, filed on 19 Dec 1988, now patented, Pat. No. US 5015733 which is a division of Ser. No. US 1988-878045, filed on 24 Jun 1988, now patented, Pat. No. US 4849513 which is a continuation-in-part of Ser. No. US 1985-709579, filed on 8 Mar 1985, now abandoned And a continuation-in-part of Ser. No. US 1983-565010, filed on 20 Dec 1983, now abandoned

DT Utility

FS Granted

EXNAM Primary Examiner: Brown, Johnnie R.; Assistant Examiner: Kunz, Gary L.

LREP Mueth, Joseph E.

CLMN Number of Claims: 8

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 1793

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention consists of compounds and methods for the synthesis of oligonucleotides which contain one or more free aliphatic amino groups attached to the sugar moieties of the nucleoside subunits. The synthetic method is versatile and general, permitting amino groups to be selectively placed at any position on oligonucleotides of any composition or length which is attainable by current DNA synthetic methods. Fluorescent dyes or other detectable moieties may be covalently attached to the amino groups to yield the corresponding modified oligonucleotide.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 5 OF 7 USPATFULL on STN

AN 92:44941 USPATFULL

TI Oligonucleotides possessing a primary amino group in the terminal nucleotide

IN Smith, Lloyd M., South Pasadena, CA, United States

Fung, Steven, Palo Alto, CA, United States

Kaiser, Jr., Robert J., Glendale, CA, United States

PA California Institute of Technology, Pasadena, CA, United States (U.S. corporation)

PI US 5118800 19920602

AI US 1991-661914 19910227 (7)

RLI Division of Ser. No. US 1988-287387, filed on 19 Dec 1988, now patented, Pat. No. US 5015733 which is a division of Ser. No. US 1988-878045, filed on 24 Jun 1988, now patented, Pat. No. US 4849513 which is a continuation-in-part of Ser. No. US 1985-709579, filed on 8 Mar 1985, now abandoned which is a continuation-in-part of Ser. No. US 1983-565010, filed on 20 Dec 1983, now abandoned

DT Utility

FS Granted

EXNAM Primary Examiner: Brown, Johnnie R.; Assistant Examiner: Kunz, Gary L.

LREP Mueth, Joseph E.

CLMN Number of Claims: 11

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 1816

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention consists of compounds and methods for the synthesis of oligonucleotides which contain one or more free aliphatic amino groups attached to the sugar moieties of the nucleoside subunits. The synthetic method is versatile and general, permitting amino groups to be selectively placed at any position on oligonucleotides of any composition or length which is attainable by current DNA synthetic methods. Fluorescent dyes or other detectable moieties may be covalently attached to the amino groups to yield the corresponding modified oligonucleotide.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 6 OF 7 USPATFULL on STN

AN 91:38568 USPATFULL

TI Nucleosides possessing blocked aliphatic amino groups

IN Smith, Lloyd M., South Pasadena, CA, United States

Fund, Steven, Palo Alto, CA, United States

Kaiser, Jr., Robert J., Glendale, CA, United States

PA California Institute of Technology, Pasadena, CA, United States (U.S. corporation)

PI US 5015733 19910514

AI US 1988-287387 19881219 (7)

RLI Division of Ser. No. US 1986-878045, filed on 24 Jun 1986, now patented, Pat. No. US 4849513, issued on 18 Jul 1989 which is a continuation-in-part of Ser. No. US 1985-709579, filed on 8 Mar 1985, now abandoned which is a continuation-in-part of Ser. No. US 1983-565010, filed on 20 Dec 1983, now abandoned

DT Utility

FS Granted

EXNAM Primary Examiner: Brown, Johnnie R.; Assistant Examiner: Kunz, Gary L.

LREP Mueth, Joseph E.

CLMN Number of Claims: 8

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 1803

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention consists of compounds and methods for the synthesis of oligonucleotides which contain one or more free aliphatic amino groups attached to the sugar moieties of the nucleoside subunits. The synthetic method is versatile and general, permitting amino groups to be selectively placed at any position on oligonucleotides of any composition or length which is attainable by current DNA synthetic methods. Fluorescent dyes or other detectable moieties may be covalently attached to the amino groups to yield the corresponding modified oligonucleotide.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 7 OF 7 USPATFULL on STN

AN 89:58823 USPATFULL

TI Deoxyribonucleoside phosphoramidites in which an aliphatic amino group is attached to the sugar ring and their use for the preparation of oligonucleotides containing aliphatic amino groups

IN Smith, Lloyd M., South Pasadena, CA, United States

Fung, Steven, Palo Alto, CA, United States

PA California Institute of Technology, Pasadena, CA, United States (U.S. corporation)

PI US 4849513 19890718

AI US 1986-878045 19860624 (6)

RLI Continuation-in-part of Ser. No. US 1983-565010, filed on 20 Dec 1983, now abandoned And Ser. No. US 1985-709579, filed on 8 Mar 1985, now abandoned

DT Utility

FS Granted

EXNAM Primary Examiner: Brown, Johnnie R.; Assistant Examiner: Tou, Jenny

LREP Mueth, Joseph E.

CLMN Number of Claims: 67

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 1959

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention consists of compounds and methods for the synthesis of oligonucleotides which contain one or more free aliphatic amino groups attached to the sugar moieties of the nucleoside subunits. The synthetic method is versatile and general, permitting amino groups to be



selectively placed at any position on oligonucleotides of any composition or length which is attainable by current DNA synthetic methods. Fluorescent dyes or other detectable moieties may be covalently attached to the amino groups to yield the corresponding modified oligonucleotide.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.